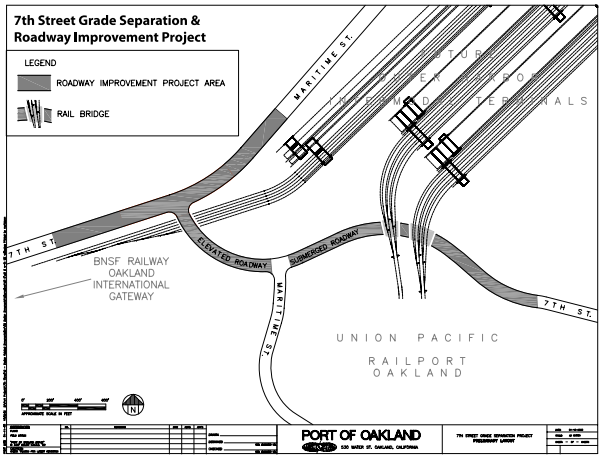
7th Street Grade Separation & Roadway Improvement Project



Project Description:

(1) The 7th Street Grade Separation Project will provide new grade separated rail crossings of 7th Street for BNSF and UP terminals, including replacement of the damaged former Southern Pacific overhead and the addition of rail expansion capacity. The Project will also improve traffic operations and expand roadway capacity through the reconstruction of 7th Street along a new alignment, in a deeper trench section, between Cedar Street and Maritime Street, reconfiguration of 7th /Maritime Street intersection into 2 3-way intersections, realignment of Maritime Street, and bicycle and pedestrian access improvements. The project also will separate truck traffic on 7th St., one of three freeway gateways into the Port, from increased rail movements between OHIT and the rail mainline to the north of 7th St. and the existing rail facilities to the south, thereby eliminating conflicts between trucks and trains at a major intersection adjacent to OHIT.

(2) This project is located directly at the terminus point for all UP and BNSF trains that serve the Port of Oakland along both the Central and Altamont Corridors. Improving the 7th Street and Maritime Street intersection will dramatically increase the Port roadway network capacity. 7th Street itself is one of three key Port access points that connects to highways, including Interstates 80 (which parallels the Central Corridor to Chicago), 880, 580 and State Route 24.

Benefits:

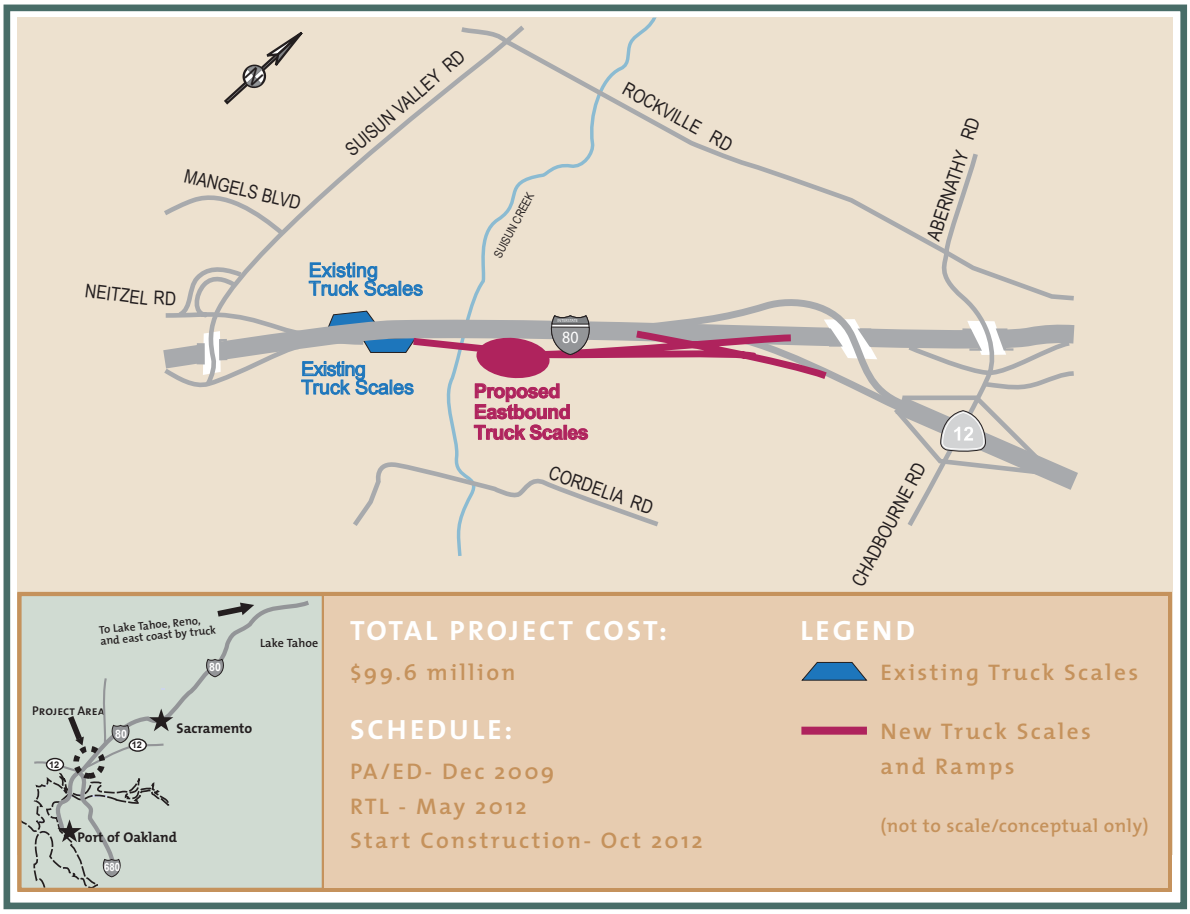
- Relieves the rail bottleneck at the 7th Street / former Southern Pacific overhead (which is currently shared by both UP and BNSF).
- The delivery of improvement related jobs, tax revenue and other benefits to the region and the state are highly dependent on the successful implementation of landside access improvement projects such as the 7th Street Grade Separation Project.
- Construction of the project is anticipated to involve hundreds of construction workers for a period of nearly three years.
- Indirect benefits of the project to the Port will allow continued growth and increased economic impact by supplementing current harbor deepening and rail access enhancements to support the anticipated 3 million TEUs moving through Oakland by 2020-2025.
- The new roadway will allow UP to more efficiently manage its Oakland hub, allowing for expanded intermodal capacity that is unimpeded by the regional carload business.
- Upgrades the traffic signals and roadway geometrics to increase roadway capacity to meet the projected demand and mitigate congestion.
- The new grade separated rail-road crossings prevent conflicts between trucks and trains at a major intersection adjacent to OHIT.
- When combined with OHIT, the project will potentially increase the rail fraction of containers handled in Oakland, further reducing the impact of trucks on the public highways and thereby mitigating traffic congestion and air quality impacts.
- In addition to the traffic impacts, trucking uses over 5 times more fuel, emits twice as much PM-10 and 4 times more CO_2 per ton-mile than a train.

Project Sponsor: Port of Oakland

Total Project Cost: $427 M

I-80 Eastbound | Cordelia Truck Scales Relocation Project

ENSURING I-80 TRADE CORRIDOR GOODS MOVEMENT RELIABILITY



Project Description

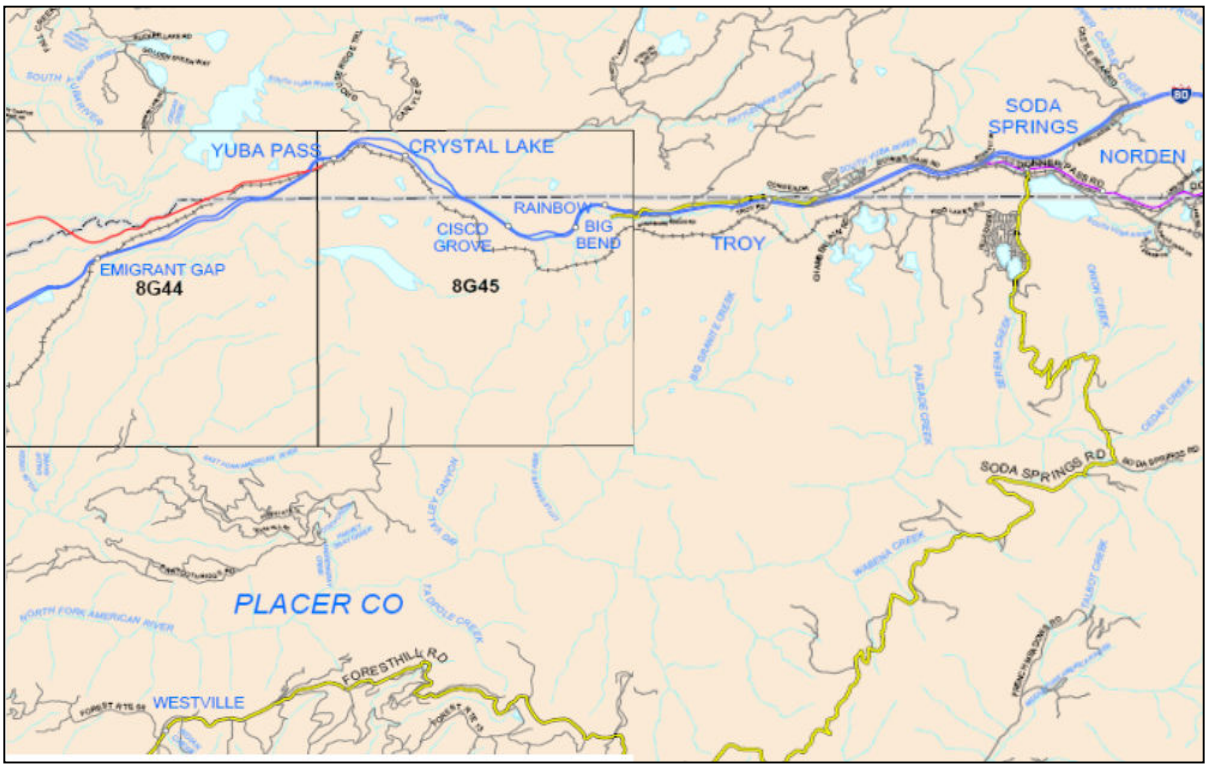
The project would rebuild and relocate the I-80 Eastbound (EB) Cordelia Truck Scales Facility, build a four-lane bridge across Suisun Creek and construct braided ramps from the new Class A truck scales to the EB I-80 and EB SR-12 ramps. Currently, the I-80 Cordelia Truck Scales significantly contribute to heavy congestion along I-80 due to truck/auto weaving conflicts and resultant queuing. The truck scales themselves, built originally in 1958, are seriously undersized and outdated. The facility would be designed to handle 115% growth/estimated 2040 truck traffic volumes and will have a useful life of at least 25 years.

Project Significance

The existing I-80 Corridor is a vital thread in the economic web of California. In addition to being an important regional commuter route, it is key for the distribution of goods from the Pacific Rim to the northern part of the state and the western U.S. For eastbound traffic out of the Bay Area, the Cordelia Truck Scales are the first inspection facility on I-80. This project supports the region's commitment to maximize and sustain any mobility gains in the corridor, specifically by providing improved safety and operations to allow the corridor to continue to function efficiently. Additionally, this project supports the mobility infrastructure that will be necessary to accommodate anticipated growth at the Port of Oakland. The facility will provide an overall benefit to goods movement within the corridor by:

- **Increasing truck throughput** from 400 trucks per hour to 1,000 trucks per hour
- **Increasing freight traffic velocity** through scales via faster/more efficient truck processing
- **Increasing safety** via better diverge and merge operations at the scales' off/on-ramps
- **Reducing congestion** through the I-80 / I-680 / SR-12 Interchange Complex
- **Improving system reliability** by reducing congestion and accidents and increasing safety

DONNER SUMMIT TRACK IMPROVEMENT AND TUNNEL CLEARANCE PROJECT



Project Description:

The Donner Summit Track Improvement and Tunnel Clearance Project (Donner Project) is located in Placer County in an unincorporated, rural area in the Sierra Nevada mountains. Union Pacific Railroad Company (UP) owns the rail line in this area. The Donner Project will construct 9.3 miles of second main track (including signals, switches and crossovers) at two locations; upgrade 1.3 miles of side track to main track standards; install a snow shed at Milepost 194.6; and increase tunnel clearances as required.

The project will provide the ability to operate high cube double-stack rail cars over between Sacramento and Reno, Nevada allowing UP to move traffic generated by the Port of Oakland over a shorter, faster, more efficient route than the current routing utilizing UP's longer, more circuitous route running though the Feather River Canyon. The project will also generate additional track capacity on the Roseville Subdivision affording UP the opportunity to (i) handle increased freight traffic volumes generated by the Port of Oakland's Outer Harbor Intermodal Terminal expansion and (ii) operate longer freight trains reducing the number of trains actually required to move these greater volumes.

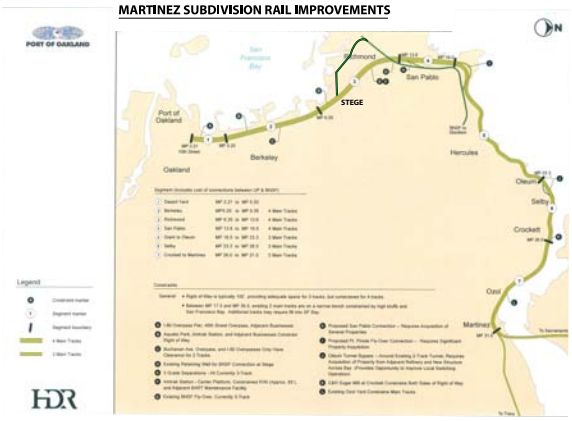
Benefits include reduced highway congestion and deterioration from shift of freight from trucks to rail; improved highway and rail safety; improved rail system throughput, velocity, and reliability; reduced environmental impacts in the Feather River Canyon; and improved key trade connection for California, thereby enhancing economic development.

Project Sponsor: Caltrans

Total Project Cost: $86 million / $43 million TCIF

Construction Start Date: Spring 2009

Martinez Subdivision & Rail Improvements



Project Description:

(1) The Martinez Subdivision (Martinez) consists of the UP Right-of-Way (ROW) from the railroad terminals at the Port of Oakland (Port) the Suisun Bay railroad bridge spanning the Carquinez Strait (Railroad mile post (mp) 2.75 through mp 31.0). It currently serves the UP, BNSF and Amtrak. There are approximately 18 to 20 cargo trains per day on the system; however that number is expected to double by 2020. There are also currently 44 passengers' trains per day on the system. The proposed project includes the addition of two additional mainline tracks from the Port of Oakland (milepost 2.75), to Stege in Richmond (milepost 9.35). The additional two mainline tracks will add the capacity to the system to allow the additional 22 freight trains per day anticipated by 2020. The project will also construct numerous crossovers and additional signaling, as well as retaining walls to support the additional track.

(2) This project is located adjacent to the terminus point for all UP and BNSF trains that serve the Port of Oakland along both the Central and Altamont Corridors. This subdivision lies directly on the Central Corridor line serving the Port of Oakland. Doubling the current number of mainline tracks through the most congested portion of the corridor should close to double current capacity. Further, the four tracks will open the possibility of dedicating one track to the passenger rail service, which will greatly enhance the movement of both passengers and cargo throughout the Martinez Subdivision.

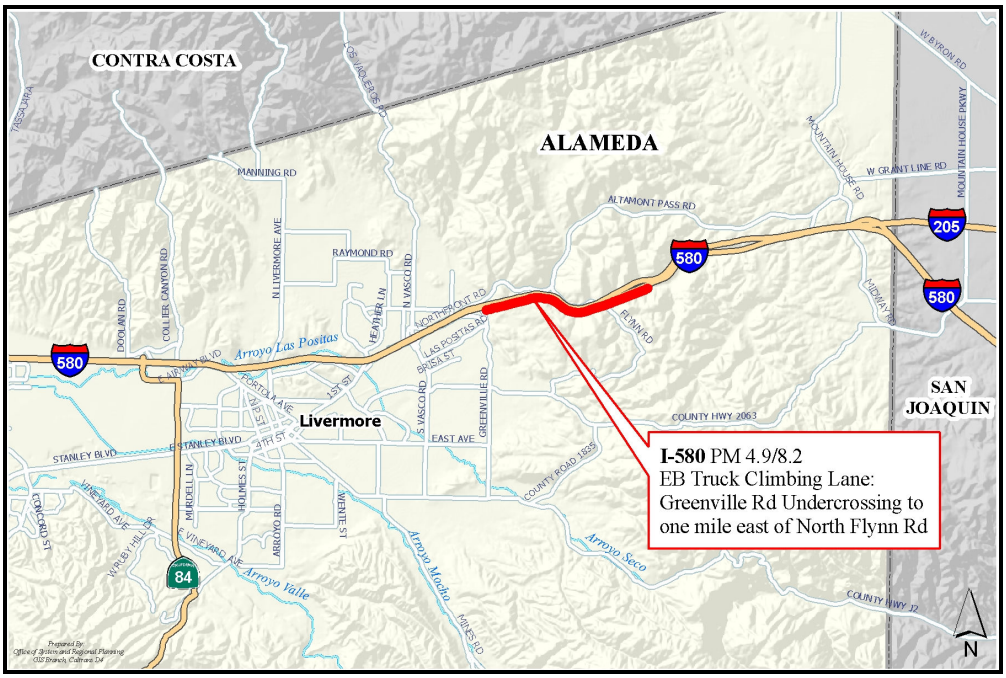
Benefits:

- The delivery of improvement related jobs, tax revenue and other benefits to the region and the state are highly dependent on the successful implementation of landside access improvement projects such as the Martinez Subdivision & Rail Improvements Project.
- The growth of the Port is dependent on the ability to increase capacity, especially intermodal rail which is projected to grow significantly throughout the west coast over the next 10 to 15 years.
- Will relieve congestion on rail main lines adjacent to the Port by providing a dedicated passenger line separate from the existing freight rail lines.
- Increasing capacity to the Martinez will greatly improve the service and dependability of the Amtrak passenger rail service along the corridor.
- Will generate environmental benefits for our region and the state by supplementing the greater mode shift away from truck movements to rail that will be provided by projects such as OHIT.
- Rail transport produces less CO2, less particulate matter and less nitrogen oxides than trucks on a ton-mile basis.
- The delivery of improvement related jobs, tax revenue and other benefits to the region and the state are highly dependent on the successful implementation of landside rail access improvement projects such as the Martinez Subdivision & Rail Improvements Project.
- Support for the intermodal terminal in Oakland, provided by this project, will help reduce the cost of goods shipped to and from Oakland. This in turn, will help to reduce the cost of products on store shelves, and the cost of exported products to foreign markets.
- Indirect benefits of the project to the Port will allow continued growth and increased economic impact by supplementing current harbor deepening and rail access enhancements to support the anticipated 3 million TEUs moving through Oakland by 2020-2025.

Project Sponsor: Port of Oakland

Total Project Cost: $215 M

INTERSTATE 580 EASTBOUND TRUCK CLIMBING LANE



Project Description:

The project proposes to widen Interstate 580 in Alameda County to construct a 3.3 mile Truck Climbing Lane in the eastbound direction over the Altamont Pass between the Greenville Road Undercrossing and one-mile east of North Flynn Road. The purpose of the project is to enhance the movement of goods between the Bay Area and Central Valley. The project will provide several safety and operational improvements, relieve traffic congestion and delay during the PM peak period by separating slow-moving traffic from existing mixed-flow lanes, and separate traffic weaving movements from the mainline. The project will reduce vehicular emissions by allowing traffic speeds to increase and remain stable, resulting in more favorable air quality benefits. Implementing the proposed project will enhance the regional and interregional movement of goods, services and people as well as provide substantial economic benefits to the Bay Area Region, Central Valley Region, State and nation.

The I-580 Eastbound Truck Climbing Lane is located in the Altamont Corridor, a major farm-to-market goods movement route. The Altamont Corridor is a highway and rail corridor which runs from the Port of Oakland along I-880/238/580 to the Central Valley. The corridor connects with I-5 and State Route 99 at the northern end of the San Joaquin Valley and eventually with the southern transcontinental rail route at the southern end of the Central Valley. This corridor connects the State's agricultural community and the Port of Oakland and also serves the growing population of the Central Valley.

The I-580 Eastbound Truck Climbing Lane project is included in the GMAP, Cal-MITSAC, MTC's Regional Goods Movement Study (2004) and the 2005 Regional Transportation Plan.

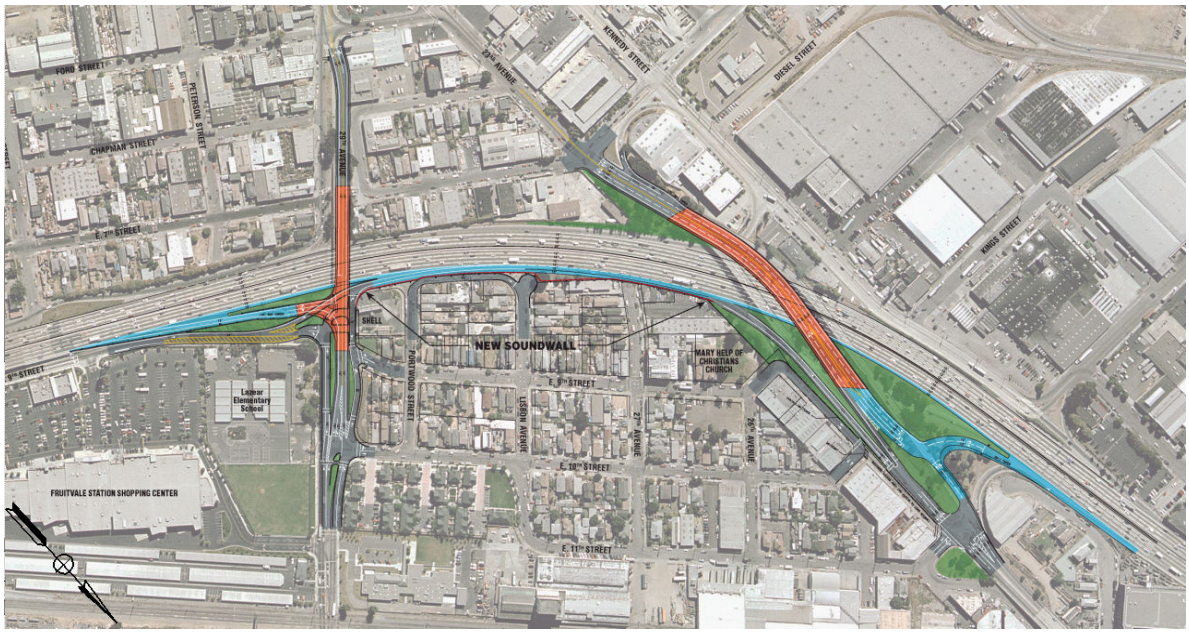
Project Sponsor: Caltrans/Alameda County CMA

Total Project Cost: $64.3 million – SHOPP Eligible

Construction Start: April 2013

Construction Complete: April 2015

I-880 Operational and Safety Improvements at 29th Avenue and 23rd Avenue Overcrossings



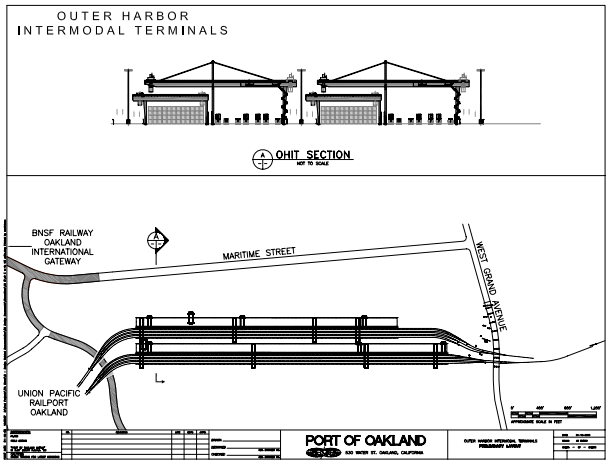
Project Description:
This project proposes operational and safety improvements to Interstate 880 (I-880) at the 29th Avenue and 23rd Avenue overcrossings in Oakland. The existing configuration of the 29th Avenue and 23rd Avenue interchanges, ramps and I-880 mainline do not meet current Caltrans standards for interchange spacing, ramp lengths, weaving distance, and overcrossing vertical clearance. The frequency of accidents in this area is approximately five times higher than the statewide average. These conditions create bottlenecks and contribute to poor operations along I-880 within the project area.

I-880 is a vital part of the Bay Area's transportation system and is part of the Altamont Corridor, which serves the Bay Area, the Central Valley, provides a key connection to Interstate 5, and supplements the Central Corridor. I-880 provides access to numerous intermodal facilities including the Port of Oakland, Oakland International Airport, and the U.S. Mail and UPS distribution centers. It is the primary north-south freight route to and from the Port of Oakland and has the highest volume of trucks in the Bay Area region.

The proposed project will improve many of the non-standard conditions in the project area, which include increasing ramp lengths, increasing weaving distance, and providing vertical clearances of 16.5 feet over the I-880 mainline. The proposed improvements are expected to improve the safety and reliability of I-880 within the project area and are anticipated to provide a 2% reduction in daily VHT (vehicle hours traveled) and an approximate 19% reduction in peak hour travel time. The peak hour free flow speed is expected to increase from 30 to 35 mph within the project area, which will provide air quality benefits and are anticipated to reduce NOx and particulate (PM10) emissions by 15 tons over the next 20 years. The improvements are also important to regional economic growth. The Port of Oakland generates nearly 44,000 jobs and provides approximately 20% of the Bay Area's domestic trade equaling $81 billion. Improving the operational and safety conditions of I-880 are anticipated to stimulate economic growth.

Project Sponsor: Alameda County Congestion Management Agency
Total Project Cost: $95 million

Outer Harbor Intermodal Terminal



Project Description:

(1) The Outer Harbor Intermodal Terminals (OHIT), a proposed intermodal rail facility, is planned to be located on 160 acres of the former Oakland Army Base, which has become part of the Port of Oakland (the "Port") through the Base Realignment and Closure process. The proposed OHIT project will provide two rail yards, each with six 4,000-foot long loading tracks and wide-span electric powered rail mounted cranes for container handling over each track group. OHIT will also provide twelve 4,000-foot long storage tracks and container buffer areas with container stack capacity of 18,000 TEUs, lead tracks near West Grand Avenue and tail tracks extending south of 7th Street, truck gates at two locations along Maritime Street, and an Administrative/Operations building, parking and maintenance buildings.

(2) With the expansion of the Port of Oakland onto the former Oakland Army Base property, this project will be located directly at the terminus point for all UP and BNSF trains that serve the Port of Oakland along both the Central and Altamont Corridors.

Benefits:

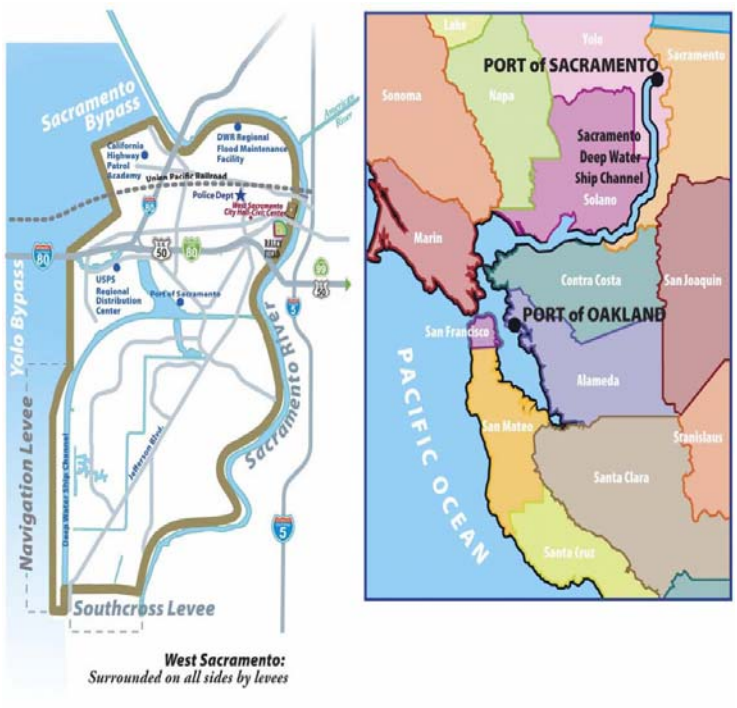
- OHIT will allow the railroads to load and unload containers more efficiently, and will help address the portwide intermodal throughput goal.
- Will relieve congestion on rail main lines adjacent to the Port.
- Will generate environmental benefits for our region and the state by affecting a greater mode shift away from truck movements to rail by providing greater rail capability here at the Port.
- In addition to the traffic impacts, trucking uses over 5 times more fuel, emits twice as much PM-10 and 4 times more CO_2 per ton-mile than a train.
- Keeping much of the Port traffic confined to the Port and the rail network that serves the Port keeps trucks off the road and allows the roads to move more efficiently.
- Will also benefit the Port and community by bringing continued trade growth and economic benefits to the region, including support for jobs in the region's and state's important technology and agricultural sectors and business and employee payments to local and state tax revenues.
- The delivery of improvement related jobs, tax revenue and other benefits to the region and the state are highly dependent on the successful implementation of landside rail access improvement projects such as OHIT.
- In addition to direct jobs at the waterfront, transportation workers, warehouses and retailers all are stimulated by the success of the commercial seaport.
- The intermodal terminal in Oakland will help reduce the cost of goods shipped to and from Oakland, helping to reduce the cost of products on store shelves, and the cost of exported products to foreign markets.
- Indirect benefits of the project to the Port will allow continued growth and increased economic impact by supplementing current harbor deepening and roadway access enhancements to support the anticipated 3 million TEUs moving through Oakland by 2020-2025.

Project Sponsor: Port of Oakland

Total Project Cost: $220 M

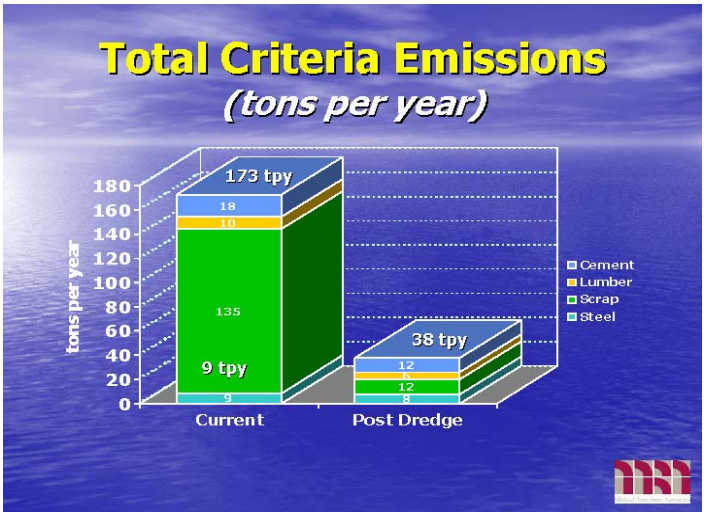
City of West Sacramento/Port of Sacramento: Sacramento River Deep Water Channel

The Port of Sacramento Project will complete the dredging of the Sacramento River Deep Water Ship Channel which runs from Suisun Bay (New York Slough) to the Port of Sacramento, in the counties of Sacramento, Contra Costa, Solano, and Yolo; a total distance of 43 miles. The Project will complete the federally authorized Channel Deepening project started in 1989 by dredging the remaining 35 miles of channel to a depth of 5 additional feet. The completed Project will enable ships of greater tonnage to transport freight from the San Francisco Bay Area to Sacramento, removing freight from truck transport on the I-80 corridor. The $80 million Project is primarily federally funded. Almost $40 million dollars will be provided by federal funds, $20 million of in kind credit has been given by the federal government to the Port; $10-$12.5 million funded by the Port; and $10 million is requested from TCIF to assist with the local match for federal construction. This project is eligible through SB 1266 (Prop 1B Enabling Legislation.)



Project Benefits:

- Second Highest Cost Benefit Ratio project in California (US Army Corps)
  - 8.4 to 1
  - $174 million net benefit to Northern California
- Congestion Relief to Interstate 80
  - 23,545 fewer two-way truck trips per year on I-80 corridor between Bay Area and Sacramento
- Allows modern, fuel efficient ships to navigate channel
  - Increase ships able to come to Sacramento from 25% to 75% of world's bulk cargo fleet
- Creates additional habitat in Delta Area
- Flood Protection
  - 6.4 million cubic yards of material for Delta levees
- Economics Benefits
  - Viability and Stability of Port & Maritime Facility
  - Will double number of full time jobs
  - Will enable for creative long term strategies for congestion relief such as container barge service

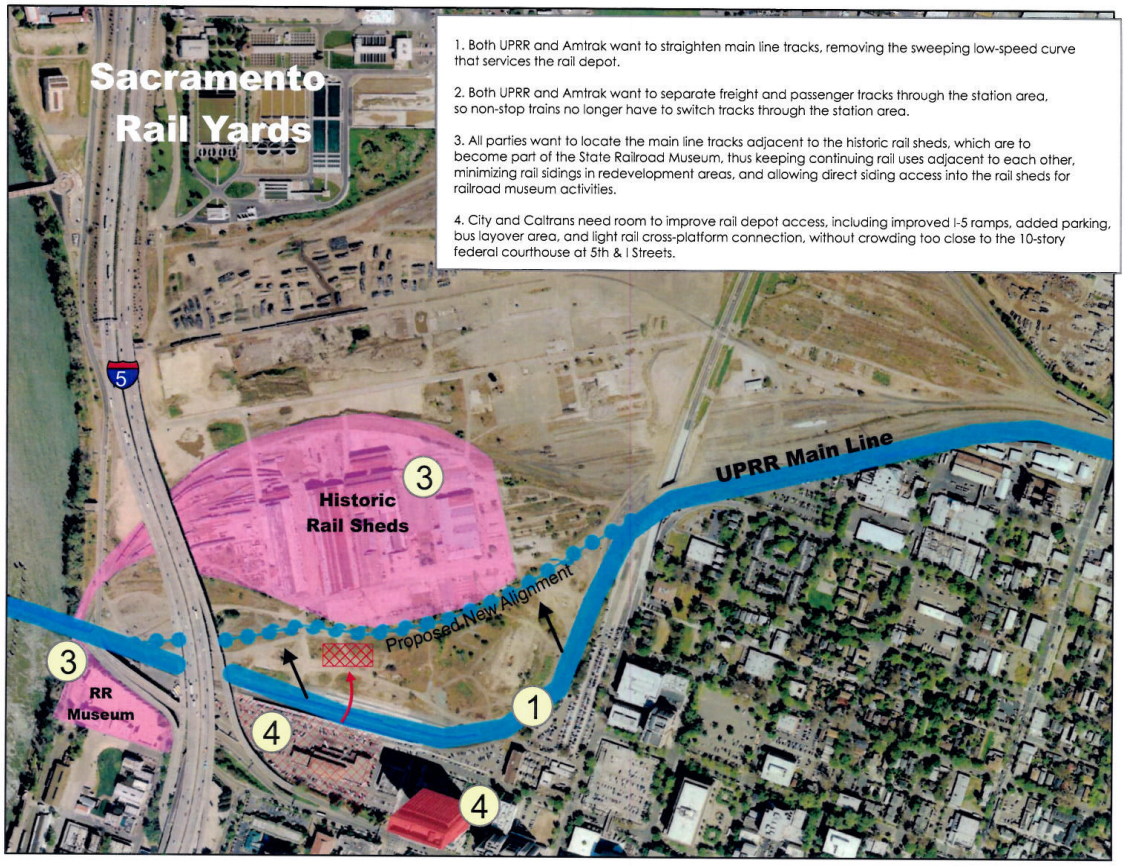


- Air Emissions Benefits
- Regional Reduction:
  - NOx 75%
  - ROG 80%
  - CO 80%
  - GHG 88%
- Overall local potential cancer risk reduction to 3.8 per million to nearby EJ Community

Project Sponsors: City of West Sacramento/Port of Sacramento

Total Project Cost: $80 million

Sacramento Depot Rail Relocation



Project Description:
The project will straighten and realign a 3300 foot section of the UPRR existing mainline. The rail relocation includes track work, new passenger platforms, walkways and a tunnel, signals, switches, street overcrossings, and utility work.

This project is one of three major choke points on the Central Corridor. The rail realignment will allow increased volumes of freight to move faster through the Sacramento Depot while improving freight and passenger safety, reducing congestion on the freeway system, and reduce air emissions. The new alignment will allow freight trains to traverse both sets of tracks over the Sacramento River bridge. Longer trains can be accommodated, thereby increasing freight capacity. The new track configuration and separated passenger facility will improve safety of passengers and freight trains. The relocation project will stimulate economic and job growth by accommodating goods movement growth in the Port of Oakland and will spur significant local revitalization and economic activity. The rail relocation will open up the 240-acre Railyards area for new urban infill development.

Project Sponsor: City of Sacramento

Total Project Cost: $50 million